

CLAIMS

1. A solar cell unit attaching apparatus comprising: a long-length mount to be fixed onto a roof; a plurality of fixtures; and frame members including to-be-sandwiched portions to be sandwiched and fixed between the mount and the fixtures and unit supports that support the ends of plate-shaped solar cell units, wherein
in the frame members, the to-be-sandwiched portions are formed so as to be positioned inside projection plane regions that project solar cell units and the unit supports of the frame members immediately below these.
2. The solar cell unit attaching apparatus according to claim 1, wherein the frame member includes a groove in which the end of a solar cell unit is fitted, an downward extending portion that bends and extends downward almost perpendicularly to the lower plate of this groove from the middle or end of the lower plate, and the to-be-sandwiched portion formed to project sideward from the downward extending portion.
3. The solar cell unit attaching apparatus according to claim 2, wherein
the mount is shaped into an upward convex having steps,
the frame member has holes in which electrical cables of a solar cell unit are inserted, and is set on the steps of the upward convex mount, and
a space surrounded by a pair of facing frame members and the upper surface of the mount is used to house the electrical cables.
4. The solar cell unit attaching apparatus according to claim 3, wherein

in the frame member, a concave portion engageable with a step of the upward convex mount is formed.

5. The solar cell unit attaching apparatus according to claim 3, wherein

5 the fixtures and the mount are fixed by bolts, and
a cover with a flat upper surface for internal protection is further provided between the pair of facing frame members.

10 6. The solar cell unit attaching apparatus according to claim 5, wherein

the cover has a guide rail at its center, and
the fixture has fastening portions to come into contact with the to-be-sandwiched portions of the frame
15 members and guide supports that engage with the guide rail of the cover to guide and support a guide.

7. The solar cell unit attaching apparatus according to claim 5, wherein

20 the cover has guide rails at both ends,
the fixture includes fastening portions to come into contact with the to-be-sandwiched portions of the frame members and a pair of guide supports that engage with the guide rails of the cover to guide and support a guide, and
25 the fixture has a length enabling it to be put between a pair of facing frame members upon rotating it by 90 degrees.

8. A solar cell unit attaching apparatus comprising a
30 long-length mount to be fixed onto a roof; a plurality of fixtures; and frame members that have to-be-supported portions to be sandwiched and fixed between the mount and the fixtures and unit supports that support the ends of

plate-shaped solar cell units, wherein

the frame members have the to-be-sandwiched portions formed almost immediately below the ends of solar cell units.